

PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

RTIP ID# <i>(required)</i> : 200435				
TCWG Consideration Date: January 26, 2010				
Project Description <i>(clearly describe project)</i> <p>The Town of Yucca Valley (Town) proposes to construct improvements to State Route 62 (SR-62) from Apache Trail (PM 10.77) to Palm Ave (PM 11.43) in the Town of Yucca Valley, California (refer to Attachment A [Project Layout]). The SR-62 improvements will be constructed mostly within California Department of Transportation (Caltrans) right-of-way and consist of a traffic signal at Church Street/SR-62, three segments of 12-foot wide landscaped/hardscaped raised medians, street lighting where gaps in lighting exist, five-foot wide sidewalks, drainage, signal modification, Americans with Disabilities Act (ADA) compliant curb ramps and driveway reconstruction, curb and gutter. The project does not propose additional capacity.</p>				
Type of Project <i>(use Table 1 on instruction sheet)</i> Change to existing state highway.				
County San Bernardino		Narrative Location/Route & Postmiles: State Route 62, PM 10.77/11.33 Caltrans Projects – EA# 0L6900		
Lead Agency: California Department of Transportation				
Contact Person Johnson Yu		Phone# 909.383.7706	Fax# 909.383.6739	Email jianxiong_yu@dot.ca.gov
Hot Spot Pollutant of Concern <i>(check one or both)</i> PM2.5 PM10 X				
Federal Action for which Project-Level PM Conformity is Needed <i>(check appropriate box)</i>				
X	Categorical Exclusion (NEPA)	EA or Draft EIS	FONSI or Final EIS	PS&E or Construction
Other				
Scheduled Date of Federal Action: May 2010				
NEPA Delegation – Project Type <i>(check appropriate box)</i>				
Exempt		X	Section 6004 – Categorical Exemption	
			Section 6005 – Non-Categorical Exemption	
Current Programming Dates <i>(as appropriate)</i>				
	PE/Environmental	ENG	ROW	CON
Start	April 2009	December 2008	November 2009	July 2010
End	May 2010	May 2010	May 2010	Jan 2011
Project Purpose and Need (Summary): <i>(attach additional sheets as necessary)</i> <p>The purpose of the proposed project is to provide for safe and efficient interstate and interregional mobility of people and goods. SR-62 carries increasing volumes of truck and recreational traffic, as well as military convoys. This increased traffic demand has resulted in traffic delays and vehicle conflicts. Existing gaps in the sidewalk system causes pedestrians to use the SR-62 shoulder. The shoulder width is a minimum of eight feet wide, which accommodates parked vehicles and allows for no additional room to accommodate pedestrians. Further, many of the existing sidewalks, signalized intersection hardware, driveways, and curb ramps were constructed before current ADA standards, resulting in non-standard conditions. The two-way, left-turn lane and multiple driveway locations allow for multiple access points and turning movements on SR-62, which increases the potential for vehicular conflicts. Street lighting exists throughout the proposed project limits, but the spacing of said lighting is inconsistent and includes gaps.</p> <p>Installation of raised medians by the proposed project would restrict turning movements on SR-62. The improvements would reduce the number of vehicular conflicts, provide an operational enhancement by restricting left-turns from the multiple driveways, and would channelize left-turns on SR-62 to designated intersections. The project proposes a traffic signal at Church Street/SR-62 where existing conditions cause excessive delay resulting in an unacceptable Level of Service (LOS) in the a.m. and p.m. peak hours. However, with the proposed signal, the LOS will improve to acceptable limits. The sidewalk, signalized intersection modification (Acoma Trail-Mohawk Trail/SR-62), driveway, and curb ramp improvements would provide continuous ADA accessible pedestrian facilities along SR-62. The proposed project would supplement the existing street lighting for consistency within the proposed project limits, which would help increase pedestrian and vehicular visibility to potentially reduce the number of conflicts.</p>				

Surrounding Land Use/Traffic Generators (*especially effect on diesel traffic*)

The project site is within the Town of Yucca Valley and is immediately surrounded by commercial uses.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

The project would maintain the existing travel lanes on SR-62 and construct a raised median restricting the offset Palm Avenue/SR-62 intersection to right-in/right-out only movements. Additionally the project would signalize the Church Street/SR-62 intersection. Project construction would commence in July 2010 and would be completed in January 2011. The traffic analysis utilized existing traffic data and horizon year (2035) traffic data. As a result, existing conditions traffic data and operations have been presented in lieu of "Opening Year Conditions" traffic data. Table 1 (Existing Traffic Volumes), depicts the existing traffic volumes along each segment within the project limits. As shown in Table 1, the existing traffic volume along SR-62 would be 28,500 annual average daily traffic (AADT), which includes truck volumes of 1,681 AADT.

Table 1
Existing Traffic Volumes

Location	Existing Conditions (2008)		
	AADT	% Trucks	# Trucks
SR-62	28,500	5.9	1,681
AADT = Annual Average Daily Traffic; SR = State Route			
Source: California Department of Transportation Traffic Data Branch, Annual Average Daily Traffic (AADT) for all vehicles on California State Highways, 2008; and California Department of Transportation Traffic Data Branch, 2007 Annual Average Daily Truck Traffic on the California State Highway System, September 2008.			

As shown in Table 2 (Existing With Project Conditions Peak Hour Level of Service), with the implementation of the proposed project, the study intersections are forecast to operate at an acceptable Level of Service (LOS) (LOS D or better) according to agency performance criteria for existing conditions and forecast existing with project conditions. As also shown in Table 2, based on agency-established thresholds of significance, the redistribution of trips due to the proposed project is forecast to result in no significant impacts at the study intersections for forecast existing with project conditions.

Table 2
Existing With Project Conditions Peak Hour Level of Service

Study Intersection	Existing Conditions		Forecast Existing With Project Conditions		Significant Impact?
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
	Delay – LOS	Delay – LOS	Delay – LOS	Delay – LOS	
1 – Apache Trail/SR-62	19.5 – C	18.5 – C	19.5 – C	18.5 – C	No
2 – Mohawk Trail-Acoma Trail/SR-62	7.0 – A	10.5 – A	7.0 – A	10.5 – B	No
3 – Church Street/SR-62 ¹	28.3 – D	84.8 – F	15.9 – B	18.4 – B	No
4 – Cholla Ave./SR-62	14.8 – B	19.5 – C	14.6 – B	19.6 – C	No
5 – Palm Ave. (West)/SR-62	14.4 – B	18.0 – C	12.0 – B	16.0 – C	No
6 – Palm Ave. (East)/SR-62	14.7 – B	16.1 – C	12.6 – B	14.5 – B	No
7 – Grand Ave./SR-62	13.6 – B	17.7 – C	13.6 – B	17.7 – C	No
LOS = Level of Service; SR = State Route					
Note: Delay shown in seconds per vehicle.					
¹ = Assumes two-way stop-control for existing conditions and signal control for forecast existing with project conditions.					
Source: RBF Consulting, State Route 62 (EA 0L690) Public Lands Highway Discretionary Fund (PLHD) Traffic Impact Analysis, November 9, 2009.					

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Table 3 (Forecast Year 2035 Traffic Volumes) compares the horizon year "2035 No Build" and "2035 Build" traffic volumes along the project study area. As shown in Table 3, traffic volumes within the project limits are well below 150,000 vehicles daily. Additionally, the percentage of trucks along this corridor is 5.9 percent, which is below the national average of eight percent¹. As depicted in

¹ Federal Highway Administration, *Highway Statistics 2004*, March 2006.

PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

Table 3, implementation of the proposed project would not change the traffic patterns in the area. As stated above, the project proposes to maintain the existing four travel lanes on SR-62 and would construct a raised median to restrict the offset Palm Avenue/SR-62 intersection to right-in/right-out only movements. Additionally, the project would include the signalization of the Church Street/SR-62 intersection. These improvements would accommodate future growth and would not induce additional growth in the area. As a result, the proposed project would not result in a significant increase of diesel vehicles.

Table 3
Forecast Year 2035 Traffic Volumes

Location	2035 No Build			2035 Build			# Trucks Percent Change
	AADT	% Trucks	# Trucks	AADT	% Trucks	# Trucks	
SR-62	47,692	5.9	2,813	47,692	5.9	2,813	0.00%

AADT = Annual Average Daily Traffic; SR = State Route

Source: California Department of Transportation Traffic Data Branch, Annual Average Daily Traffic (AADT) for all vehicles on California State Highways, 2008; and California Department of Transportation Traffic Data Branch, 2007 Annual Average Daily Truck Traffic on the California State Highway System, September 2008.

Additionally, Table 4 (Forecast Year 2035 Level of Service) summarizes the existing and forecast future year 2035 peak hour intersection LOS for the project limits along SR-62. As shown in Table 4, implementation of the proposed project would alleviate several peak hour deficiencies thereby reducing congestion. However, the Apache Trail/SR-62 and Cholla Avenue/SR-62 intersections would continue to operate at a deficient LOS during the PM peak hour.

Table 4
Forecast Year 2035 Level of Service

Study Intersection	Forecast Year 2035 Without Project Conditions		Forecast Year 2035 With Project Conditions		Significant Impact?
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
	Delay – LOS	Delay – LOS	Delay – LOS	Delay – LOS	
1 – Apache Trl/SR-62	31.1 – D	53.1 – F	31.1 – D	53.1 – F	No
2 – Mohawk Trl-Acoma Trl/SR-62	9.3 – A	11.6 – B	9.3 – B	11.6 – B	No
3 – Church St/SR-62 ¹	596.1 – F	>999.9 – F	16.6 – C	23.4 – C	No
4 – Cholla Ave/SR-62	22.9 – C	48.0 – E	22.7 – C	54.0 – F	No
5 – Palm Ave (West)/SR-62	22.8 – C	34.4 – D	13.2 – C	19.6 – C	No
6 – Palm Ave (East)/SR-62	22.5 – C	25.2 – D	13.6 – B	17.4 – C	No
7 – Grand Ave/SR-62	17.2 – C	34.2 – D	17.2 – C	34.2 – D	No

LOS = Level of Service; SR = State Route

Note: Delay shown in seconds per vehicle.

¹ = Assumes two-way stop-control for existing conditions and signal control for forecast existing with project conditions.

Source: RBF Consulting, State Route 62 (EA 0L690) Public Lands Highway Discretionary Fund (PLHD) Traffic Impact Analysis, November 9, 2009.

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
See Above.

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
See Above.

Describe potential traffic redistribution effects of congestion relief (impact on other facilities)

Assuming implementation of the raised median and restriction of northbound and southbound left-turn movements at the offset Palm Avenue/SR-62 intersection, motorists accessing SR-62 are expected to re-distribute onto the roadway system via parallel and other routes in the vicinity of the project site. The *Traffic Impact Analysis* for the project, prepared by RBF Consulting (November 9, 2009) indicates the forecast re-assignment of traffic volumes assuming implementation of the proposed project for forecast existing with project conditions would not significantly redistribute traffic.

Comments/Explanation/Details (attach additional sheets as necessary)

The EPA's March 2006 guidance document *Transportation Guidance for Qualitative Hot-spot Analysis in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas* references a two step criteria to identify "a significant volume of diesel truck traffic." The first criterion is facilities with greater than 125,000 ADT volumes. If the first criterion is met, the second criterion is that eight percent or more of said traffic volumes (i.e., 10,000 vehicles or more) are diesel truck traffic volumes.

As discussed above, traffic volumes within the project limits are less than 150,000 vehicles daily. Additionally, the percentage of trucks along this corridor is 5.9 percent, which is below the second criterion of eight percent trucks. Therefore, implementation of the proposed project would not cause a significant increase of diesel vehicles (trucks). According to the *Transportation Conformity Guidance for Qualitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas*, this project is not a project of air quality concern under 40 CFR 93.123(b)(1).

The proposed project would not conflict with an applicable plan, policy, or regulation of an agency with jurisdiction over the project. The proposed project is also consistent with Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP) (RTP ID 200435) and Regional Transportation Improvement Program (RTIP) (RTIP ID 200435) and is intended to meet the traffic needs in the area based on local land use plans.